Speed Governor for Märklin Delta Control

one extra locomotive

Design by N. Körber DH0HAN

Three components and an arrow-style knob. This manual speed control for the Marklin DELTA multi-loc system adds independent control for an additional locomotive.

In multi-loc mode, Mărklin’s type 6604 Delta Control is capable of controlling four model locomotives. An external connection is available for a manual speed governor to control one additional locomotive. A suitable manual control is available commercially under the designation DELTA-Pilot, but do consider a ‘home brew’ circuit as shown here.

The circuit

As shown by the circuit diagram in **Figure 1**, only three components are required. The loc speed is effectively dependent on resistor R1 in combination with potentiometer P1. The locomotive does not move with the wiper of P1 turned to the ‘top’ end, i.e., with P1 effectively short-circuited. The locomotive may be reversed by pressing pushbutton S1.

Construction hints

The circuit does not require screening measures or special cables to connect to the 6604 Control Unit. As shown by the introductory photograph, the components are easily fitted in a small plastic (ABS) case. The photograph shows how the prototype was built.

If you decide to use a switch and a potentiometer with solder tags, the wiring may be ‘in the air’. Resistor R1 should be a close-tolerance (1%) metal film type, or one whose value has been accurately established at 2,200 ohms.

The potentiometer in the circuit may have the (usual) tolerance of 10%.

The connections to the 6604 DELTA control unit are interchangeable.

More hints

The author happily employs the manual speed governor in combination with his DELTA Control unit, which has been in use since 1999. The printed circuit board in the control is labelled ‘39110 DELTA, Ver 3.4, 14/94’. The perfect operation of the manual speed governor was also proved beyond doubt by the Mărklin Data Spy which will be published in a future issue. However, that does not imply that we can warrant proper operation of the speed governor with all available control units, or those that will be produced in the future.

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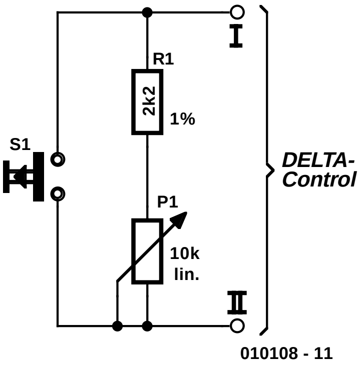

Figure 1. Circuit diagram of the Speed Governor.

Author’s homepage

www.koerber-home.de